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Safety

Port Operations Checklists and Risk Assessment

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Summary. This pamphlet provides port operations checklists and a generic port operations risk assessment. This pamphlet must be used with AE Pamphlet 385-15.

Applicability. This pamphlet applies to leaders in U.S. Army elements who are planning or conducting port operations in the USAREUR area of operation.

Forms. AE and higher-level forms are available through the Army in Europe Publishing System (AEPUBS).

Records Management. Records created as a result of processes prescribed by this pamphlet must be identified, maintained, and disposed of according to AR 25-400-2. Record titles and descriptions are available on the Army Records Information Management System website at <https://www.arims.army.mil>.

Suggested Improvements. The proponent of this pamphlet is the USAREUR Safety and Occupational Health Office (AEAGA-S, DSN 370-8084). Users may suggest improvements to this pamphlet by sending DA Form 2028 to the USAREUR Safety and Occupational Health Office (AEAGA-S), Unit 29351, APO AE 09014-9351.

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CONTENTS

1. Purpose
2. References
3. Explanation of Abbreviations
4. Introduction

- 5. Checklists and Tables
- 6. Port-to-Fort Operations

Tables

- 1. Leader's Checklist
- 2. Driver's Checklist
- 3. Port-to-Fort Checklist
- 4. Port Operations Risk Assessment

Glossary

1. PURPOSE

The purpose of this pamphlet is to enable leaders to plan or conduct port operations in the USAREUR area of responsibility with minimum risk to personnel and equipment. This pamphlet must be used with AE Pamphlet 385-15.

2. REFERENCES

a. Publications.

- (1) AR 25-400-2, The Army Records Information Management System (ARIMS).
- (2) AE Pamphlet 385-15, Leader's Operational Accident-Prevention Guide.
- (3) AE Pamphlet 385-15-1, Commander's Convoy Checklist and Risk Assessment.
- (4) AE Pamphlet 385-15-2, Commander's Rail Operations Checklist and Risk Assessment.

b. Form. DA Form 2028, Recommended Changes to Publications and Blank Forms.

3. EXPLANATION OF ABBREVIATIONS

The glossary defines abbreviations.

4. INTRODUCTION

a. Seaports are traditionally busy, congested, and confusing places. As vehicles arrive at the seaport, port personnel will give them a quick, visual inspection to identify those with obvious problems and scan the Logistics Application of Automated Marking and Reading Symbols (LOGMARS) label. Vehicles carrying hazardous and sensitive cargo will be separated from the rest of the vehicles and sent to the hazardous-and sensitive-cargo staging areas. The other vehicles will be sent to the vehicle staging areas to be rechecked and have LOGMARS labels rescanned.

b. Drivers and assistant drivers will be sent out of the staging areas to an assembly area for transport.

c. Vehicles must arrive at the time specified in the port message, and everyone must know what to do when the vehicles arrive.

5. CHECKLISTS AND TABLES

Leaders and drivers planning or conducting port operations will use the appropriate table (a through d below) to help them assess hazards and risks. The glossary defines abbreviations used in the tables.

- a. Table 1, Leader's Checklist.
- b. Table 2, Driver's Checklist.
- c. Table 3, Port-to-Fort Checklist.
- d. Table 4, Port Operations Risk Assessment.

6. PORT-TO-FORT OPERATIONS

Operations at a sea port of debarkation (SPOD) can be divided into the following phases:

a. Ship Arrival. The keyword during this phase is flexibility. Ship arrival time is approximate. After the ship arrives, it takes time to tie it up. After that, customs and other agents must inspect the ship and clear the cargo for entry into the country. Consequently, equipment will not be immediately ready for pickup when the ship arrives.

(1) As a rule of thumb, off-load operations will begin one-half to a full day after the ship arrives. Unit movement officers should use the checklist in table 3, part I, to ensure the unit is ready for off-loading.

(2) In preparation for the ship's arrival, the transportation officer can obtain a copy of the vessel-load papers from the Military Traffic Management Command (MTMC). From these papers, unit movement officers can then determine the unit, type, and condition of cargo, and the type and location of hazardous cargo before the vessel arrives. Off-loading can then proceed properly and safely.

b. Off-Loading. A ship off-load operation resembles a cattle drive on the verge of a stampede. This is the most dangerous part of ship operations, and everyone working in or near the port must remain alert. Vehicles will be moving out of the ship quickly; stevedore gangs will be in all the holds unleashing vehicles; tank engines will fill holds with noise and exhaust fumes, even though the ship's blowers will be operating at maximum capacity. In this busy, hot, noisy, smelly environment, everyone must give safety top priority. Table 3, parts II and III, lists items to check during the off-load phase of port operations.

c. Staging of Cargo. Staging occurs at the same time as the off-load phase. Cargo will be parked by unit in the road-march staging area, and by type and trainload in the rail-staging area. Vehicle movement into the staging areas is rapid, but the transportation terminal unit (TTU) will have laid out the staging areas, and ground guides will direct vehicles into the proper lanes. Table 3, part IV, lists items to check during this phase of the operation.

d. Departure of Cargo From the Terminal by Road, Rail, or Air. Only after SPOD staging areas are filled should convoy commanders allow their drivers into the staging areas. It is a safety hazard to have drivers milling around before the staging-area operation is complete, because of the off-loaded cargo rapidly filling the area at the same time. Before departure, TTU reception teams must scan LOGMARS labels for accountability of Army vehicles.

(1) The staging area is not the place to reconfigure convoys for road march. Convoy commanders should coordinate with the TTU for the location of an area to form up in road-march order. Convoy commanders should also ensure every driver and leader receives a road-march safety briefing. AE Pamphlet 385-15-1 provides checklists for convoy operations.

(2) Rail load-out will begin when the train arrives and the cars are placed on the siding. AE Pamphlet 385-15-2 provides rail operations checklists.

Table 1 Leader's Checklist	
ITEM TO CHECK	CHECK
• Is there enough drinking water available? (<i>Estimate 1 day at the terminal, although actual time should be less.</i>)	
• Has the unit's terminal-control plan (including the following items) been explained to drivers and supervisory teams?	
Where drivers and other unit personnel should assemble after parking their vehicles.	
Water-point locations.	
Latrine locations.	
Trashcan locations for MRE packages and other waste.	
• Has emphasis been placed on unit integrity (keeping everyone together or knowing where they are) and NCO control?	
• Has the unit key-control officer coordinated with port operators on availability and location of port key-control NCOs and officers? (<i>If possible, get a radio from TTU to communicate with key-control personnel.</i>)	
• Have soldiers been informed of how they will depart the terminal, and when and where they will be ported?	
• After all soldiers are assembled, is there a "check team" to inspect the unit's vehicles for mistakes, oversights, items left behind, shackles, and radios left on?	
• Was a recall-accountability check performed before departing the terminal?	
• Are only essential personnel being allowed to enter the staging area while it is in use? (<i>Drivers will not be allowed to fill out forms in vehicle-staging areas while traffic is coming into the staging area. Extra people in the staging area cause safety and control problems.</i>)	
• Have plans been implemented to ensure no nesting will take place at the port? (<i>Nesting should be done at the assembly area in the field or at the marshaling area.</i>)	
• Have MILVANS and CONEXs been certified as hazardous or nonhazardous? (<i>This is usually done during the packout in the assembly area during which certifications are put on the MILVANS and CONEXs. The certifications sometimes blow off containers on the way to the port. If they do, unit transportation officers or NCOs at the port must replace missing certificates to prevent port personnel from having to open containers to determine their classification.</i>)	
• Have personnel going aboard the ship during the load-out received the following?	
Preboarding ship-safety briefing.	
Helmet or hardhat.	
Hearing protection (ear muffs or earplugs).	
Canteen.	
Steel-toed shoes.	

Table 2 Driver's Checklist	
ITEM TO CHECK	CHECK
• Are drivers alert and paying attention?	
• Are driving lights turned on at the terminal?	
• Are ground guides being used for the following?	
Tracked vehicle movement.	
When backing or moving vehicles in congested areas.	
In vehicles weighing 2½ tons or more.	
When visibility is limited.	
• Are ground guides stationary when guiding vehicles (not walking backwards)?	
• Is there proper distance between vehicles?	
• Are vehicles kept away from handling materials (for example, chains or ropes that could snag on a cleat or tideway fitting and yank cargo off a truck)?	
• Have vehicles with maintenance problems been reported to port reception personnel?	
• Are whip antennas secured before entering the terminal? Are tracked vehicle antennas removed and stored inside hulls?	
• Are main guns of tanks and fighting vehicles in the locked position for travel?	
• Is terminal speed (normally 15 miles per hour) being obeyed?	
• Have personal and military items been removed from the vehicle?	
• Have all BII and AAL items left in the vehicle cab been wrapped, blocked, and braced?	
• Are windows rolled up? Are all vehicles locked?	
• Are the following rules being observed when driving near port helipads?	
Aircraft have the right of way.	
Antennas must be tied down or removed.	
ATC personnel will provide ground directions. (<i>Drivers will move only when told to do so by ATC personnel.</i>)	
Lights must be dimmed.	

Table 3 Port-to-Fort Checklist	
Part I - Ship Arrival	CHECK
● As far ahead of time as possible, the unit movement officer should coordinate the following with the port TTU:	
Ship arrival time.	
Time off-loading will begin.	
When and where to set up maintenance facilities.	
Messing and billeting facilities at port.	
How much cargo will be returned by rail, and when and where rail-loading will begin.	
When equipment will be ready for pickup and what procedures will be necessary for equipment outprocessing.	
● In addition to the items above, the unit movement officer should—	
Plan for a strong maintenance element. (<i>Many vehicles will need the attention of mechanics or recovery equipment to move them off the ship.</i>)	
Plan to be at the terminal when the ship arrives. (<i>Bring maintenance teams to board the ship to begin pre-off-load cargo inspection and repair.</i>)	
Determine when and where the port safety briefing will be for driving teams, on-ship maintenance personnel, and soldiers involved in shipside rail load-out and fly-out operations.	
Determine how many multilicensed drivers will be necessary to off-load the ship.	
Bring a golf-cart-type vehicle to help mechanics get their tools and gear around the ship.	
Plan for aviation maintenance support to assist in reconfiguring aircraft for fly-out.	
Part II - Off-Loading (PSA)	CHECK
● Leaders should use the following guidance to emphasize critical points to the PSA team:	
Begin each day with a safety “tailgate” session. Ask soldiers for any seen or perceived hazards. Do a quick hazard analysis and plan with soldiers how to avoid the hazards. Report hazards to the TTU safety officer.	
Mentally prepare PSA soldiers for frustration. A ship off-load never goes smoothly; problems develop that cause delays (such as immovable vehicles). Thorough planning can eliminate most problems, but not all of them.	
Enforce use of ground guides on the ship. Ground guides are required at the top and bottom of ramps, never in the middle. Drivers must know who is the controlling guide.	
Control the ship’s ramps. Do not let vehicles proceed while personnel are coming up or down the ramp.	
Rotate on-ship PSA teams with off-ship teams to give people working on the ship a break.	
Check soldiers aboard the vessel for symptoms of carbon monoxide poisoning (headaches, fatigue, nausea, dizziness, and muscle weakness).	
Tell soldiers to bring problems immediately to their supervisor’s attention.	
Tell soldiers if they see anything life-threatening they must stop operations immediately and radio the PSA supervisor or nearest TTU member.	
Warn soldiers not to walk under operating cranes or suspended loads.	
Enforce no-smoking rules. (<i>Smoking is allowed only in designated areas.</i>)	
Part III - Off-Loading (Aircraft)	CHECK
● For aircraft off-load operations, the TTU should notify the supporting post aviation officer and request the following support:	
Aviation maintenance battalion.	
Aviation safety officer inspection of proposed port helipad, maintenance area, and port for hazards.	
ATC for temporary port helipads (including publishing a NOTAM).	
Enough aviation personnel to ensure vehicle control in the area around the port helipad.	
Part IV - Staging of Cargo	CHECK
● PSA teams will—	
Have plenty of water available in each staging area. Make sure soldiers drink water frequently and use the buddy system to watch for heat injuries.	
Request TTU assistance if moving-unit personnel begin to gather in the working staging area. (<i>Unit drivers loitering in the staging area hinder PSA drivers.</i>)	
Make sure shuttle-vehicle drivers concentrate on safe transport of PSA drivers, not on speed. If a pickup truck is used as a shuttle vehicle, ensure soldiers sit on the floor of the truckbed, not on the sides.	

Table 4 Port Operations Risk Assessment		
	Hazard/Activity/Item	Recommended Controls
Arrival at Port	Load planning	Ensure vehicles and equipment nested in the backs of other vehicles are included in the load plan. Plan for blocking and bracing materials, and test them before loading and movement.
		Do not overgross prime movers carrying a nested vehicle. Make sure the AUEL shows the actual height, length, and weight of the prime carrier and its nested vehicle or the vehicle when built-up.
		Turn in all munitions. Check packs and unit gear for loose ammunition and explosives.
		Establish standards for inspection and retention of war souvenirs.
		Check vehicles for stray animals and insects and properly dispose of them.
		On redeployments, check each vehicle for loose rounds, pyrotechnics, and munitions tucked into storage compartments.
		Always block, brace, and tie down nested vehicles and equipment. Ship ramps sometimes exceed a 45-degree angle and loose loads may tumble out.
		Make sure nested vehicles have all lifting shackles in place, all shackle-bracket welds are sound, and shackles, pins, and cotter pins are the right size.
		Carry extra shackles for unit vehicles. (Shackles often disappear, and the vehicle may not be shipped without them.)
		Identify lifting shackles by painting the word "Lift" next to them. Paint "Tiedown Only" next to tiedown shackles.
		Ensure AUEL shows the proper status of sensitive unit equipment or hazardous cargo.
		Identify hazardous classes of cargo and eliminate compatibility problems. Make sure the unit AUEL accurately lists which vehicles contain sensitive or hazardous cargo.
		Prohibit storage of loose items in vehicle cabs. Shifting during movement can damage both the item and the inside of the vehicle.
		Load plans must assume vehicles will be deck-loaded and not loaded in dry holds; therefore, vehicles must be prepared to withstand a constant stream of sea water.
		Use plastic to wrap radios in racks inside vehicles.
		Adjust vehicle fuel loads so that vehicles arrive at port with tanks no more than three-quarters full. Always check with the departure-port Army terminal unit for the latest in-country standards for fuel tank levels and 5-gallon fuel-can levels.
		Make sure all hoses are drained if fuel tanks must be purged, and ensure fuel is drained from generator sets before packing.
		Do not drain POL tanks and hoses onto the ground. Use proper fuel-drain cans and dispose of POL according to the unit SOP.
		Ensure vehicles containing compressed gas cylinders (other than fire extinguishers) are placarded on both sides.
		Ensure oxygen and acetylene cylinders are removed from wreckers and maintenance vehicles. Build racks in a trailer and secure all unit acetylene cylinders in the rack.
		CAUTION: Do not overgross the trailer. Stencil the unit designation on each cylinder and properly placard the trailer.
		Before loading, ensure all vehicles are inspected for fuel, oil, and other leaks.
		Ensure any vehicle with a brake problem has a big steering-wheel placard stating: "CAUTION! NO BRAKES. DO NOT DRIVE. MOVE ONLY WITH TOW BAR."
	Load planning - overgrossed vehicles	Make sure the AUEL lists the prime mover and its nested vehicle. Make sure the AUEL lists actual built-up height, length, and weight.
Port Operations	Load planning - secondary loads	Ensure secondary loads are secured to prevent motion-induced damage.
		Do not allow secondary loads to be piled, scattered, or haphazardly placed on vehicles.
		Develop and test load plans before moving to port.
		Ensure LOGMARS and AUEL data list actual "as shipped" weights, not "as published" weights.

Table 4 Port Operations Risk Assessment		
	Hazard/Activity/Item	Recommended Controls
		Ensure the weight of secondary loads does not exceed the reported weight of the vehicle.
		Ensure secondary loads of hazardous materials are listed in LOGMARS data.
		Segregate hazardous cargo.
Movement to Port	Command and control	<p>Appoint a movement liaison team consisting of a team leader, an NCOIC, and an administration NCO to—</p> <ul style="list-style-type: none"> - Ensure safe and timely processing of unit assets from field assembly areas, through marshaling areas, to the port. - Ensure drivers get proper rest periods. - Identify hazards and control measures for port operations. - Notify the public of convoys, road closures, and routes, when possible, through the PAO, G5, or MP. - Provide a POC for safety and operational questions about equipment-preparation standards for sea movement. - Maintain contact with port operating elements on equipment preparation, United States customs and agriculture standards, and the portcall message. - Resolve movement-to-port problems before departure. - Provide a seaport element to make final vehicle-shipment decisions. - Establish controlled environments in which personnel are cared for and accounted for from the start through their time at the SPOD (for example, water points, first-aid station). - Keep commanders and participating units informed. - Organize maintenance assets to assist PSA in repairing vehicles in marshaling and port areas. <p>Ensure the movement liaison team has the following equipment:</p> <ul style="list-style-type: none"> - Hand-held radios. - Dedicated FM frequency. - Dedicated telephone lines at base and port. - Secure fax. - Dedicated utility helicopter reserved for maintenance and parts flights or command and control. <p>Locate the movement liaison team at the assembly area during vehicle preparation and at the port during the movement-to-port phase.</p> <p>Ensure the movement liaison team has a marshaling area plan that covers—</p> <ul style="list-style-type: none"> - Receiving convoys. - Refueling/defueling vehicles to Coast Guard limits and arranging for excess fuel storage. - Performing unit and direct-support maintenance before staging. - Providing final technical inspection to ensure all vehicles are ready for sea movement. - Pre-staging vehicles by unit or type. - Dining and sleeping areas. - Latrine facilities. - Administrative support. - Positive personnel control. - Spot-checking vehicle preparation and LOGMARS labels.
Arrival at Port	Leader checklist	<p>At the start of each day, go over standard ground-guide safety procedures and hand-and-arm signals. Stress ground-guide use in the motor pool and the vehicle-preparation area.</p> <p>Carry enough water for your soldiers. Estimate 1 day at the terminal.</p> <p>Explain the unit terminal-control plan to all driving supervising teams (for example, assembly points, water points, latrines, trashcans for MRE packages).</p> <p>Stress unit integrity and NCO control; soldiers should not wander.</p> <p>The unit key-control officer must coordinate with port operators on the availability and location of the key-control NCO or officer. The key-control officer should get a radio from the TTU to communicate with the key-control team.</p>

Table 4**Port Operations Risk Assessment**

	Hazard/Activity/Item	Recommended Controls
		<p>Explain how soldiers will depart the terminal and when and where they will be transported.</p> <p>Have a check team go through unit vehicles after all soldiers are assembled. Check for mistakes, oversights, items left behind, shackles, and lights or radios left on.</p> <p>Before departing the terminal, perform a rollcall-accountability check.</p> <p>Allow only essential personnel to enter staging areas while the areas are being filled.</p> <p>Do not allow drivers to fill out forms in vehicle-staging areas while vehicles are arriving. Too many people in the staging area while port personnel are moving cargo is dangerous and confusing.</p> <p>Do not nest vehicles and equipment at the port. Nesting should be done at the assembly area or marshaling area.</p> <p>Ensure MILVANs and CONEXs are certified as either hazardous or nonhazardous. Certifications are put on at the packout in the assembly area. At the port, have the unit transportation officer or NCO replace any certifications that have blown off.</p> <p>Ensure personnel going aboard ship have a preboarding safety briefing, a helmet or hardhat, hearing protection (earplugs or ear muffs), and a full canteen.</p>
	Driver checklist	<p>Stay alert at all times.</p> <p>Turn on driving lights while in the terminal.</p> <p>Use ground guides (see Dockside - Ground guides below).</p> <p>Keep the correct distance between vehicles.</p> <p>Keep vehicles free from hanging materials (such as chains or ropes that could snag a cleat or tiedown fitting and yank cargo off the truck).</p> <p>Report vehicles with maintenance problems to port reception personnel.</p> <p>Secure antennas.</p> <p>Put main guns of tanks and fighting vehicles in travel lock.</p> <p>Obey terminal speed limits.</p> <p>Do not leave any personal or military items in vehicles.</p> <p>Any BII or AAL item that has to be left with the vehicle must be wrapped, blocked, and braced.</p> <p>Make sure windows are rolled up and vehicles are locked.</p> <p>If near the port helipad, give aircraft the right-of-way, tie down or remove antennas, dim vehicle lights, and proceed only when told to do so by ATC personnel giving ground directions.</p>
	Dockside - Fire protection	<p>Coordinate with local fire departments for coverage.</p> <p>Make sure fire extinguishers are always available.</p> <p>Ensure firefighters are aware of the types of hazardous materials being loaded.</p>
	Dockside - Ground guides	<p>Enforce the use of ground guides.</p> <p>Ensure all drivers are trained in the proper use of ground guides and trained to act as ground guides.</p> <p>Ground guides must stay at the sides of the vehicle they are guiding, never in the vehicle's path (to prevent being crushed between vehicles).</p> <p>Personnel will never walk backwards while ground-guiding.</p> <p>Use ground guides whenever moving vehicles in congested areas; use two ground guides when backing or when vision is restricted.</p> <p>At night, ensure ground guides have reflective belts and flashlights or chemical lights.</p>
	Dockside - Materiel handling	<p>Use trained and certified personnel.</p> <p>Train additional operators for long-term operations.</p>
	Dockside - Personnel unfamiliar with shipboard and dock environments, and Navy or Marine instruction, signals, and alarms	<p>Have qualified Navy or MTMC personnel provide briefings.</p> <p>Conduct familiarization tours.</p> <p>Conduct hands-on training on chains and locking devices. Warn personnel about getting body parts pinched or caught between wires, cables, or other tiedown equipment. Also warn them of the "whip effects" of released chains and cables.</p>

Table 4**Port Operations Risk Assessment**

	Hazard/Activity/Item	Recommended Controls
	Dockside - Protective equipment	Mark “go” and “no-go” zones.
		Keep unsupervised personnel away from operations.
		Replace Kevlar helmets with ANSI hardhats if possible.
		Do not wear Kevlar helmets for electrical work.
		Issue and enforce the use of leather or leather-palmed gloves.
		Issue hearing-protection devices.
		Wear steel-toed boots whenever possible. Warn personnel of foot hazards.
		Issue goggles to personnel if blocking and bracing will require driving nails or sawing wood.
		Include reflective belts for night or bad-weather operations.
	Dockside - Sling loads	Attach slings only to proper lift points.
		Before each lift, inspect loads for proper rigging.
		Ensure personnel remain clear of suspended loads.
	Shipboard - Embarked vehicles	Inspect embarked vehicles to ensure operators have turned off lights and master switches, as required.
	Shipboard - Internal shipboard ramps (poor traction and lack of guardrails)	Ensure soldiers wear serviceable boots.
		Minimize one-person loads; use the buddy system.
		Do not allow running on ramps.
		Warn personnel to stay clear of ramp edges and moving ramps.
	Shipboard - Carbon monoxide in vehicle holds	Do not allow soldiers to lie on, under, or between vehicles.
		Coordinate with the ship’s crew for proper ventilation.
		Minimize use of engines.
	Shipboard - Moving heavy and large equipment through tight doors and hatches	Minimize the amount of time personnel spend in the holds.
		Use lights as directed.
		Use ground guides.
		Use only experienced drivers.
		Immediately report any contact with watertight doors.

Glossary

AAL	additional authorizations list
AE	Army in Europe
ANSI	American National Standards Institute
AR	Army regulation
ATC	air traffic control
AUEL	automated unit equipment list
BII	basic issue item
CG, USAREUR/7A	Commanding General, United States Army, Europe, and Seventh Army
CONEX	container express
DA	Department of the Army
FM	frequency modulation
G5	assistant chief of staff, G5 (civil affairs)
LOGMARS	Logistics Application of Automated Marking and Reading Symbols
MILVAN	military-owned demountable container
MP	military police
MRE	meals, ready-to-eat
MTMC	Military Traffic Management Command
NCO	noncommissioned officer
NCOIC	noncommissioned officer in charge
NOTAM	notice to airmen
PAO	public affairs office
POC	point of contact
POL	petroleum, oils, and lubricants
PSA	port support activity
SOP	standing operating procedure
SPOD	sea port of debarkation
TTU	transportation terminal unit
USAREUR	United States Army, Europe